



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H090041

Mode: Highway

Status: Submitted

I-40

From/Cross Street: SR 1734 (Carolina Street Se)/SR 1826

Specific Improvement Type: 8 - Improve Interchange

To:

Project Category: Statewide Mobility

Length: 2

TIP#: I-5008

Fully Funded in Draft STIP? No

Cost to NCDOT: \$3,335,000

Description:

SR 1734/SR 1826 (Exit 111). Revise interchange to Diamond Configuration.

Division(s): Division 13

County(s): BURKE

MPOS(s)/RPO(s): Greater Hickory MPO

Project Location



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Statewide Mobility Total Score: 29.06

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
[Travel Time] Benefit/Cost (30%) 0.48 Congestion (V/C) (30%) 63.82 Safety (10%) 33.35 Economic Competitiveness (10%) 0.07 Multimodal + [Freight & Military] (20%) 32.16	N/A	N/A
Totals: Weight: 100% Weighted Score: 29.06		

Regional Impact Total Score: 55.14

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 63.82 [Travel Time] Benefit/Cost (25%) 0.48 Accessibility / Connectivity (10%) 57.29 Safety (10%) 33.35	Percent: 15% Points: 100	Percent: 15% Points: 100
Totals: Weight: 70% Weighted Score: 25.14		

Division Needs Total Score: 41.19

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) 63.82 Safety (10%) 33.35 [Travel Time] Benefit/Cost (20%) 0.48	Percent: 25% Points: 0	Percent: 25% Points: 100
Totals: Weight: 50% Weighted Score: 16.19		

Project Data ***Existing Conditions**

Existing Cross-Section:	
Speed Limit:	65
Length (miles):	2
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Interstate
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	10
Roadway has Curb & Gutter?	No
Volume (AADT):	57290.16
Capacity:	84038.9
Volume/Capacity Ratio:	0.68
% Autos:	89%
% Trucks:	11%
Truck Volume:	6431.51
Crash Density:	0
Crash Severity:	0
Critical Crash Rate:	0
Crash Frequency:	0
Severity Index:	66.7
County Tier Designation:	1
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	19
Existing Median Type (for Cost Estimation):	Divided
Pavement Condition Rating:	100
Actual Congested Speed:	30.37
Travel Time Index:	1.15

Project Benefits

Project Cross-Section:	
Speed Limit:	65
Length (miles):	2
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Interstate
TerrainType:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	10
Travel Time Savings for 30 Years (Total):	69000
Travel Time Savings for 30 Years (Autos):	61253.92
Travel Time Savings for 30 Years (Trucks):	7746.08
Long-Term Employment:	1
% Change in Economy:	3.2E-07
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	No
In CTP or LRTP?	No
CTP/LRTP Name:	
CTP/LRTP Completion Year:	
Submitted by:	Division 13

* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!ine tool and associated databases.

Project Ownership**Division**

Division	Percent	Regional Impact	Division Needs
Division 13	100%	100	0
	0%	0	0
	0%	0	0
TOTAL Division Points		100	0

MPO/RPO

MPO/RPO	Percent	Regional Impact	Division Needs
Greater Hickory MPO	100%	100	100
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		100	100

Project Cost and Source

Construction Cost:	\$2,875,000	Cost Estimation Tool
Right-of-Way Cost:	\$460,000	Cost Estimation Tool
Utilities Cost:	\$0	Cost Estimation Tool
Total Project Cost:	\$3,335,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$3,335,000	